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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/069,636 | 08/05/2002 | Rainer Kiefer | WSP: 204-US | 3353 |

7590
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07/30/2003

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| EXAMINER |
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HEPPERLE, STEPHEN M

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| ART UNIT | PAPER NUMBER |
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3753

DATE MAILED: 07/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,636

Applicant(s)

KIEFER, RAINER

Examiner

Stephen M. Hepperle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 20-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the relative diameters of the thread sets as recited in claim 39 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim 38 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not seen how the maximum outside diameter of the attachment means can be smaller than the inside diameter of the cylinder screwthreads, if the two are to be threaded together (unless one uses a really big Helicoil™ thread repair kit).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-25 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over George or Pasternack. George shows a pressure cylinder valve with external valve 6 and a fill

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valve 27 that has always open restriction path 18, 22 for outflow of fluid. Pasternack shows a pressure cylinder valve with external valve 64 and a fill valve 102 that has always open restriction path 96a, 96b, for outflow of fluid. These restriction paths are always independent of the check valve opening. The references do not state the amount of resistance provided, but it would have been obvious to one of ordinary skill in the art to size the restriction such that a desired pressure drop occurs at a desired flow rate. Regarding claims 35-36, both references provide "an attachment portion" to connect to a pressure tank.

Claims 20-23, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt. Platt shows a pressure cylinder with a discharge valve assembly inserted into and mated to the tank 10, including a discharge valve 20 and a porous/sintered flow resistance 24. The plastic resistor has an average pore diameter of less than 10 micrometers (claim 28) and an average porosity of 10-50% (claims 29-30). It would have been obvious to one of ordinary skill in the art to size the restriction such that a desired pressure drop occurs at a desired flow rate.

Claims 35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mays (DE 2406313). Mays shows a discharge valve arrangement 4 where the threads at the top are the same as at the bottom. It would have been obvious to size restrictor 11 for any desired flow rate, as such is within the ordinary skill of those working in the art.

Claims 37-39 rejected under 35 U.S.C. 103(a) as being unpatentable over Pasternack. Pasternack shows an attachment portion (threads 9) that screw into female threads in the tank.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pasternack in view of Szwargulski. Szwargulski shows a sintered check valve 14 for the purpose of allowing some fluid to pass when the valve is closed. It would have been obvious in view of Szwargulski

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to make the Pasternack valve 20 of sintered material to eliminate the need for a separate drilled passage 22 and the extra machining thus required.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pardee and Gardner show porous valve seats. Ewbank shows a sintered flow resistor 32 carried by a valve.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Hepperle whose telephone number is 703-308-1051. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Rivell can be reached on 703-308-2599. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7765 for regular communications and 703-308-7765 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.


Stephen M. Hepperle
Primary Examiner
Art Unit 3753

SMH
July 24, 2003